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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,462	11/14/2001	Yuzo Koshiro	H9876.0065/P065	6992

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EXAMINER

NGUYEN, KIMBINH T

ART UNIT	PAPER NUMBER
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2671

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,462

Applicant(s)

KOSHIRO ET AL.

Examiner

Kimbinh T. Nguyen

Art Unit

2671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5,6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-14 are pending in the application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2-4, 7, 8, 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Berend et al. (5,692,117).

Claim 1, Berend et al. clearly anticipated displaying a skeleton model set for the display object on a display device (col. 34, line 62; fig. 35); displaying an input outline trace on the display device (col. 35, lines 28-38; fig. 38); associating the input outline trace with the skeleton model of the display object; expanding and converting the outline trace associated with the skeleton model into a three-dimensional display object image; displaying the data of the expanded and converted 3D display object image on the display device (col. 35, lines 28-67; figs. 38-40).

Claim 2, Berend et al. discloses the skeleton model is constructed from a plurality of skeletal parts (col. 34, lines 62-67).

Claim 3, Berend et al. discloses converting the input outline trace into closed outline traces corresponding to each of the plurality of skeletal parts (col. 35, lines 57-60; figs. 39a, 39b).

Claim 4, Berend et al. discloses the skeleton model of the display object is displayed (col. 34, lines 62-66; figs. 35 and 38), on the display device, with the basic shape image of the display object and the skeletal parts constituting the skeleton model being superposed with each other (superimposed each other; col. 19, lines 28-36).

Claim 7, Berend et al. discloses performing when there are a plurality of the input outline traces for the skeleton model, the step of converting the outline traces into a single closed outline trace formed by connecting the outermost traces of the outline traces (the union of the outermost sectors of each section, linked by curve portions; col. 47, lines 7-11).

Claim 8, Berend discloses performing when the input outline trace is input to span a plurality of skeletal parts (the outline curve generated using the extent points; col. 45, lines 41-50), the step of converting the input outline trace into closed outline traces (a closed curve) for each of the plurality of skeletal parts (col. 46, line 45 through col. 47 line 16).

Claim 12, the rationale provided in the rejection of claim 1 is incorporated herein.

Claims 13 and 14, the rationale provide in the rejection of claim 1 is incorporated herein. In addition, Berend et al. teaches a recording medium (col. 11, lines 20-22).

Art Unit: 2671

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 6, 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berend et al. (5,692,117) in view of Hunter (6,384,819).

Claim 5, Berend does not suggest a game program; however, Hunter discloses the program constitutes a game program executed by the information processing equipment (col. 1, lines 34-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the constituting a game program as taught by Hunter into the outline curve of Berend for displaying object generation program executed by information processing equipment, because it would perform automatic animation via a game or animation package (col. 7, lines 49-50).

Claim 6, Berend et al. discloses setting a basic body having a specific attribute parameter in advance for the skeleton model (attribute control point comprises a parametric position on the outline curve of skeleton; col. 51, lines 12-15); attaching an attribute parameter (to add an attribute control point; col. 51, line 8), obtained by modifying the attribute parameter of the basic body according to the ratio of the outline trace associated with the skeleton model to the basic body data, to the data of the expanded and converted 3D display object image. Berend does not teach modifying the attribute parameter; however, Hunter teaches the parameters of the skeleton are then adjusted (modified) to surround the entire desired object in the digital image; col. 4, lines

Art Unit: 2671

66-67; col. 5, lines 14-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature of modifying the parameters of the skeleton as taught by Hunter into the outline curve of Berend for converting a 3D data to the display device, because it would provide a system and method for quickly and effectively generating a customized animatable character in a computer system (col. 1, lines 60-62). Further, Hunter also discloses: **Claim 9**, the behavior mode of the generated 3D display object is characterized by the attribute parameters (col. 7, lines 22-36; col. 8, lines 1-13). **Claim 10**, the attribute parameter can be modified through selection of a texture to be applied to the generated 3D display object (col. 5, lines 1-9). **Claim 11**, the attribute parameter can be modified (can be changed) through the area of the closed outline traces associated with a plurality of skeletal parts constituting the skeleton model, or through the volume of the generated 3D object (col. 7, lines 22-36).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kimbinh Nguyen** whose telephone number is **(703) 305-9683**. The examiner can normally be reached **(Monday- Thursday from 7:00 AM to 4:30 PM and alternate Fridays from 7:00 AM to 3:30 PM)**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman, can be reached at (703) 305-9798.

Any response to this action should be mailed to:

Art Unit: 2671

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Part II, 2121 Crystal Drive,
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the Technology Center 2600 Customer Service Office
whose telephone number is (703) 306-0377.

November 28, 2003



Kimbinh Nguyen

Patent Examiner AU 2671